

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX

IN THE MATTER OF:  
Tucson Airport Soils

Respondents:  
Tucson Airport Authority,  
City of Tucson

) Docket No. 91-05a  
)  
) AMENDED ADMINISTRATIVE ORDER  
) PURSUANT TO SECTION 106  
) OF THE COMPREHENSIVE  
) ENVIRONMENTAL RESPONSE,  
) COMPENSATION, AND  
) LIABILITY ACT OF 1980  
) as amended, 42 U.S.C.  
) Section 9606(a)  
)

PREAMBLE

The Respondents, having conferred with the U.S. EPA and having submitted both oral and written comments pursuant to the opportunity afforded them in the Administrative Order in this matter dated December 11, 1990 (Order), and the undersigned having been duly advised and having considered said comments, this Amended Administrative Order (Amended Order) is issued on this date to the Tucson Airport Authority and the City of Tucson, Respondents, pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Section 9606(a), as amended by the Superfund Amendments and Reauthorization Act of 1986 Pub. L. 99-499 (CERCLA), and delegated to the Administrator of the United States Environmental Protection Agency (U.S. EPA) by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Assistant Administrator for Solid Waste and Emergency Response and to the EPA Regions by U.S. EPA Delegation Numbers 14-14-A and 14-14-B. As used hereafter, the words "the Orders" refers to both the Order and the Amended Order.

By copy of this Amended Order, the State of Arizona has been notified of the issuance of this Amended Order as required by Section 106(a) of CERCLA, 42 U.S.C. Section 9606(a).

This Amended Order requires the Respondents to undertake and complete a site characterization study and to implement an emergency response action to abate an imminent and substantial endangerment to the public health or welfare or the environment that may be presented by the actual or threatened release of hazardous substances.

## FINDINGS OF FACT

Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds:

1. The Tucson International Airport (Airport), located in southwest Tucson, Arizona, is within the Tucson International Airport Area which is a facility on the National Priority List. The Airport is bordered by areas of mixed land use, including residential, commercial, and industrial development. Within the Airport, near its western edge and south of the Tucson Aviation Center, there is a below-grade concrete structure, as more particularly shown on Map 4 and Map 5, attached hereto and incorporated herein by this reference. Said vault and any surrounding contiguous areas which are found to contain hazardous substances are hereafter referred to as the "Site."
2. The concrete structure is proximal to an area of ground water contamination that is the subject of a recently negotiated Federal Court Consent Decree requiring the Respondents and others to remediate said contamination. The structure is believed to contain several chambers and was used for the storage and/or disposal of various waste materials.
3. The City of Tucson holds title to the property upon which the aforesaid concrete structure is located. The Tucson Airport Authority is a public entity which leases the Tucson International Airport, including the area occupied by the concrete structure, from the City of Tucson, and in turn has sublet the area upon which said concrete structure is located. The Tucson Airport Authority manages the Tucson International Airport.
4. High concentrations of volatile organic compounds and semi-volatile organic compounds, as identified hereafter, have been detected in and near the concrete structure. Some of these same chemicals are present in the groundwater that is the subject of the cleanup required by the aforementioned Consent Decree. The integrity of the concrete structure is unknown at this time and the high concentrations of chemicals in the concrete structure may be a continuing source of contamination to the ground water.
5. The Tucson Airport Authority, through Daniel B. Stephens & Associates, Inc., is engaged in the investigation of potential sources of groundwater contamination which are the subject of the cleanup requirements in the aforementioned Consent Decree. During that investigation, Daniel B. Stephens & Associates, Inc. obtained soil and aqueous samples at and near the concrete structure, which disclosed the presence of chemicals at the concentrations set forth in Table 1 attached hereto and incorporated herein by this reference. The TAA immediately notified EPA and began development of a work plan to further investigate the concrete structure, which plan, in part, is now the subject of the Orders.

6. The presence of such chemicals at such high concentrations, if they are a continuing source of contamination to the groundwater, pose a threat to the public health and welfare in that said groundwater forms a part of the aquifers of the Tucson Basin. The aquifers of the Tucson Basin are the primary source of drinking water for the City of Tucson.

7. There presently exists a concrete cap over the vault, the structural integrity of which is unknown. If the structural integrity is insufficient or inadequate to contain the contents of the vault, there may be human exposure to the chemicals through inhalation or dermal contact.

8. Daniel B. Stephens & Associates, Inc., on behalf of the Tucson Airport Authority has prepared a Sampling and Analysis Plan dated July 20, 1990, which was modified in response to comments by U.S. EPA in a document titled Investigative Work Plan Underground Structure South of 3 Hangars, dated November 16, 1990. The latter document, which incorporates the former document by reference, is hereafter referred to as the draft Work Plan.

#### CONCLUSIONS OF LAW

Based on the foregoing Findings, U.S. EPA has concluded that:

1. The below grade concrete structure, its contents, and areas surrounding it where hazardous substances have come to be located is a "facility" or a portion of a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. Section 9601(9).

2. Each Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. Section 9601(21).

3. Respondent City of Tucson is the present "owner" of the site, as defined by Section 101(20) of CERCLA, 42 U.S.C. Section 9601(20). Respondent Tucson Airport Authority is the present lessee/sublessor of the site and, therefore, controls the site as an "operator", as defined by Section 101(20) of CERCLA. Both are therefore liable persons under Section 107(a) of CERCLA, 42 U.S.C. Section 9607.

4. The chemicals set forth in Table 1 are "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14).

5. The presence of said chemicals at the concentrations shown on Table 1 in a structure, the integrity of which is unknown, constitutes an actual or threatened "release" as that term is defined in Section 101(22) of CERCLA, 42 U.S.C. Section 9601(22).

### DETERMINATIONS

Based on the Findings of Fact and Conclusions of Law, the Director, Hazardous Waste Management Division, EPA Region IX, has made the following determination:

1. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment.
2. The actions required by the Orders, if properly performed, are consistent with the National Contingency Plan (NCP), 40 CFR Part 300, as amended, and CERCLA; and are reasonable and necessary to protect the public health, welfare and the environment.
3. The conditions present at the Site may present an imminent and substantial endangerment to the public health or welfare or the environment based upon consideration of the factors set forth in the NCP at 40 CFR section 300.415(b). These factors include, but are not limited to, the following:
  - a. actual or potential exposure to hazardous substances in that employees of the tenants and of the Tucson Airport Authority, as well as nearby residents, may inhale airborne chemicals released from the vault, as a consequence of the conditions described in Finding 7, above.
  - b. actual or potential contamination of drinking water supplies as described in Finding 6, above.
  - c. actual or potential exposure to hazardous substances in that any person at or near the vault may come into contact with the contents of the vault, or with any chemicals which may have been released from the vault.

### ORDER

Based upon the foregoing Findings, Conclusions and Determinations, and pursuant to Section 106(a) of CERCLA, 42 U.S.C. Section 9606(a), it is hereby Ordered that Respondents undertake the following actions under the direction of EPA's On-Scene Coordinator.

1. Upon receipt of the Order, the Respondents shall restrict access to the Site and provide twenty-four (24) hour security at the Site which meets with EPA approval.
2. The Respondents shall not allow any materials, equipment or any other item to be removed from the Site without prior EPA approval.

3. Within ten (10) calendar days after the effective date of the Order, the Respondents shall submit to U.S. EPA for approval revisions to the draft Work Plan as required by U.S. EPA. The draft Work Plan shall provide a concise description of the activities to be conducted to comply with the requirements of the Orders. The draft Work Plan shall be reviewed by U.S. EPA, which may approve, disapprove, require additional revisions, or modify the Work Plan. Respondents shall implement the Work Plan as finally approved by U.S. EPA. Once approved, the Work Plan shall be deemed to be incorporated into and made a fully enforceable part of the Orders.

4. Work shall be conducted in accordance with a site health and safety plan, a sampling and analysis plan, and a schedule of the work to be performed. The site health and safety plan shall be prepared in accordance with EPA's Standard Operating Safety Guide, dated November, 1984 and updated July, 1988 and with the Occupational Safety and Health Administration (OSHA) regulations applicable to Hazardous Waste Operations and Emergency Response, 29 CFR Part 1910.120. The Work Plan and other submitted documents shall demonstrate that the Respondent can properly conduct the actions required by the Orders.

5. Respondents shall retain a contractor qualified to undertake and complete the requirements of the Orders, and shall notify U.S. EPA of the name of such contractor within five (5) days of the effective date of the Order. U.S. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondents. In the event U.S. EPA disapproves of a selected contractor, Respondents shall retain a different contractor to perform the work, and such selection shall be made within two (2) business days following U.S. EPA's disapproval.

6. Within five (5) calendar days after U.S. EPA approval of the Work Plan, Respondents shall implement the Work Plan. Failure of the Respondents to properly implement all aspects of the Work Plan shall be deemed to be a violation of the terms of the Orders.

7. Respondents shall provide EPA with written weekly summary reports. These reports should contain a summary of the previous week's activities and planned up-coming events.

8. EPA shall be informed at least forty-eight (48) hours prior to any on-site work.

9. All sampling and analysis shall be consistent with the "Removal Program Quality Assurance/Quality Control Interim Guidance: Sampling, QA/QC Plan and Data Validation," EPA OSWER Directive 9360.4-01, dated February 2, 1989 and guidance documents prepared by Region IX, and previously provided to the Tucson Airport Authority.

10. All materials containing hazardous substances, pollutants or contaminants removed pursuant to the Orders shall be disposed of or treated at a facility approved by the On-Scene Coordinator and in accordance with the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. Section 9601, et seq., as amended, the U.S. EPA Revised Off-Site Policy, and all other applicable Federal, State, and local requirements.

11. On or before the effective date of the Order, the Respondents shall designate a Project Coordinator. To the greatest extent possible, the Project Coordinator shall be present on site or readily available during site work. The U.S. EPA has designated, as its On-Scene Coordinator (OSC), Donn Zuroski, and as its Remedial Project Manager (RPM), Daniel Opalski. The RPM and the Project Coordinator shall be responsible for overseeing overall implementation of the Orders; however, the OSC and the Project Coordinator shall be responsible for overseeing the field work to be performed pursuant to the Orders. To the maximum extent possible, written communication between the Respondents and the U.S. EPA, and all documents, reports and approvals, and all other correspondence concerning the activities relevant to the Orders, shall be directed through the RPM and the Project Coordinator. During field activities, communication shall be directed through the OSC and the Project Coordinator.

12. The U.S. EPA shall have the right to change its designated RPM and On-Scene Coordinator and the Respondents shall have the right to change their designated Project Coordinator. U.S. EPA shall notify the Respondents, and Respondents shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. Notification may initially be oral, but shall promptly be reduced to writing.

13. The U.S. EPA On-Scene Coordinator shall have the authority vested in an On-Scene Coordinator by the NCP, 40 CFR Part 300, as amended, including the authority to halt, conduct, or direct any work required by the Orders, or to direct any other response action undertaken by U.S. EPA or the Respondents at the facility.

14. No extensions to the above time frames shall be granted without sufficient cause. All extensions must be requested, in writing, and shall not be deemed accepted unless approved, in writing, by U.S. EPA.

15. All instructions by the U.S. EPA On-Scene Coordinator or his designated alternate shall be binding upon the Respondents as long as those instructions are not clearly inconsistent with the National Contingency Plan.

16. Respondents shall provide access to the Facility to U.S. EPA employees, contractors, agents, and consultants at reasonable times, and shall permit such persons to be present and move freely

in the area in order to conduct inspections, including taking photographs and videotapes of the Facility, to do cleanup/stabilization work, to take samples to monitor the work under the Orders, and to conduct other activities which the U.S. EPA determines to be necessary.

17. Nothing contained herein shall be construed to prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of the Orders, or from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondents in the future to perform additional activities pursuant to CERCLA, 42 U.S.C. Section 9601 et seq., or any other applicable law.

18. The provisions of the Orders and the directions of the On-Scene Coordinator shall be binding on the employees, agents, successors, and assigns of the Respondents.

19. This Amended Order shall be effective immediately.

20. Copies of all records and files relating to hazardous substances found on the Site shall be retained for six years following completion of the activities required by the Orders and shall be made available to the U.S. EPA prior to the termination of the removal activities under this Order.

21. The Respondents shall submit a final report summarizing the actions taken to comply with the Orders. The report shall contain, at a minimum: identification of the facility, a description of the locations and types of hazardous substances encountered at the facility upon the initiation of work performed under the Orders, a chronology and description of the actions performed (including both the organization and implementation of response activities), a listing of the resources committed to perform the work under the Orders (including financial, personnel, mechanical and technological resources), identification of all items that affected the actions performed under the Orders and discussion of how all problems were resolved, a listing of quantities and types of materials removed, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, and a presentation of the analytical results of all sampling and analyses performed and accompanying appendices containing all relevant paperwork accrued during the action (e.g., manifests, invoices, bills, contracts, permits). The final report shall also include an affidavit from a person who supervised or directed the preparation of that report. The affidavit shall certify under penalty of law that based on personal knowledge and appropriate inquiries of all other persons involved in preparation of the report, the information submitted is true, accurate and complete to the best of the affiant's knowledge and belief. The report shall be submitted within thirty (30) days of completion of the work required by the Orders.

22. All notices, reports and requests for extensions submitted under terms of the Orders shall be sent by certified mail, return receipt requested, and addressed to the following:

one copy	Donn Zuroski On Scene Coordinator, H-8-3 U.S. EPA 75 Hawthorne Street San Francisco, CA 94105
two copies	Daniel Opalski Remedial Project Manager, H-7-2 U.S. EPA 75 Hawthorne Street San Francisco, CA 94105
one copy	Charles C. McKinley Assistant Regional Counsel U.S. EPA (RC-5) Office of Regional Counsel 75 Hawthorne Street San Francisco, CA 94105

24. If any provision of the Orders is deemed invalid or unenforceable, the balance of the Orders shall remain in full force and effect.

#### ACCESS TO ADMINISTRATIVE RECORD

The Administrative Record supporting the selection of the response action for this site is available for review on normal business days between the hours of 9:00 a.m. and 5:00 p.m. in the Office of Regional Counsel, United States Environmental Protection Agency, Region IX, 75 Hawthorne Street, 16th Floor, San Francisco, California. Please contact Charles McKinley, Assistant Regional Counsel, at (415) 744-1317 to review the Administrative Record. An index of the Administrative Record is attached hereto.


#### EPA RESPONSE AUTHORITY

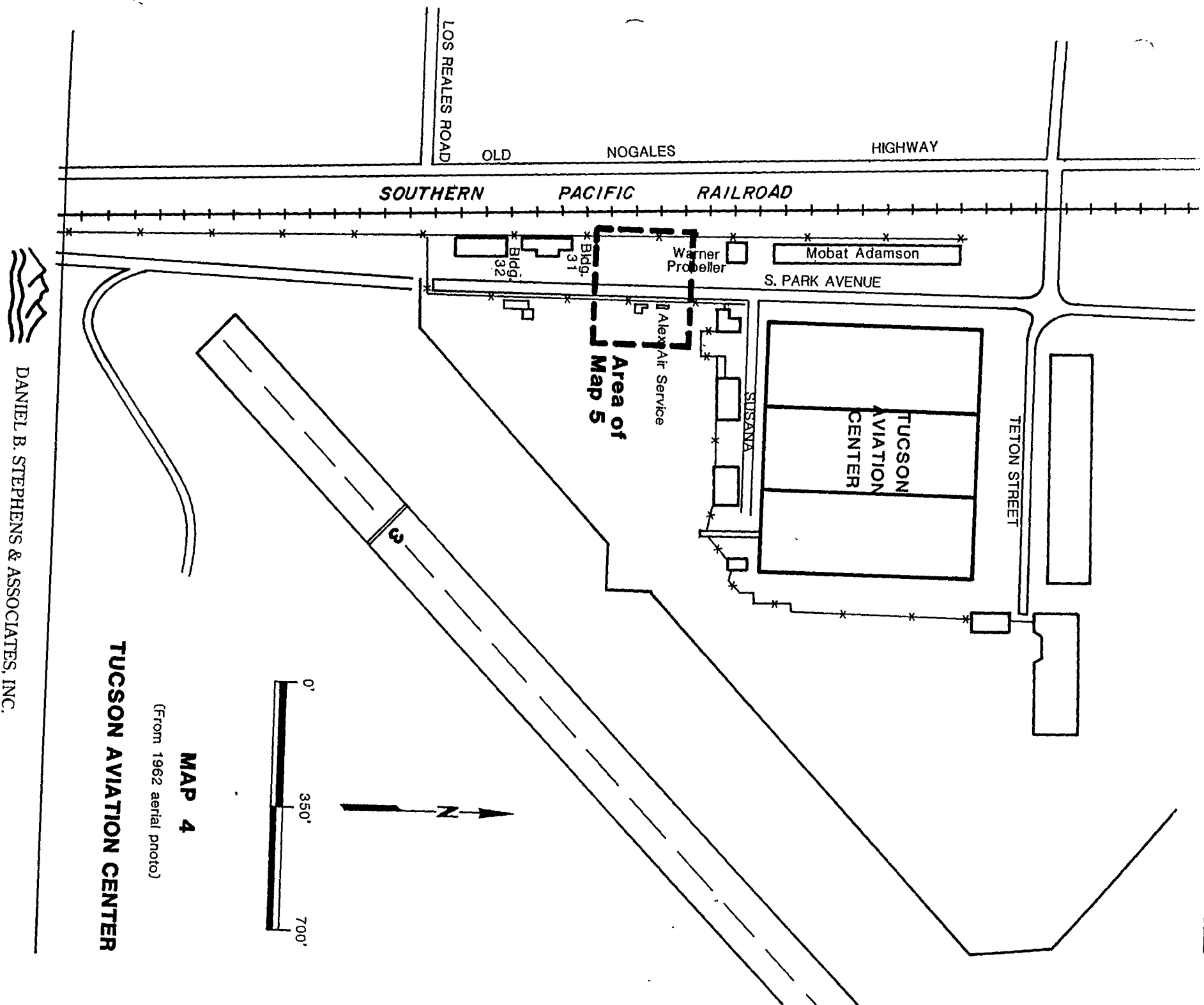
Respondents are hereby placed on notice that U.S. EPA will take any action which may be necessary in the opinion of U.S. EPA for the protection of public health and welfare and the environment, and Respondents may be liable under Section 107(a) of CERCLA, 42 U.S.C. Section 9607(a), for the costs of those government actions.

PENALTIES FOR NONCOMPLIANCE

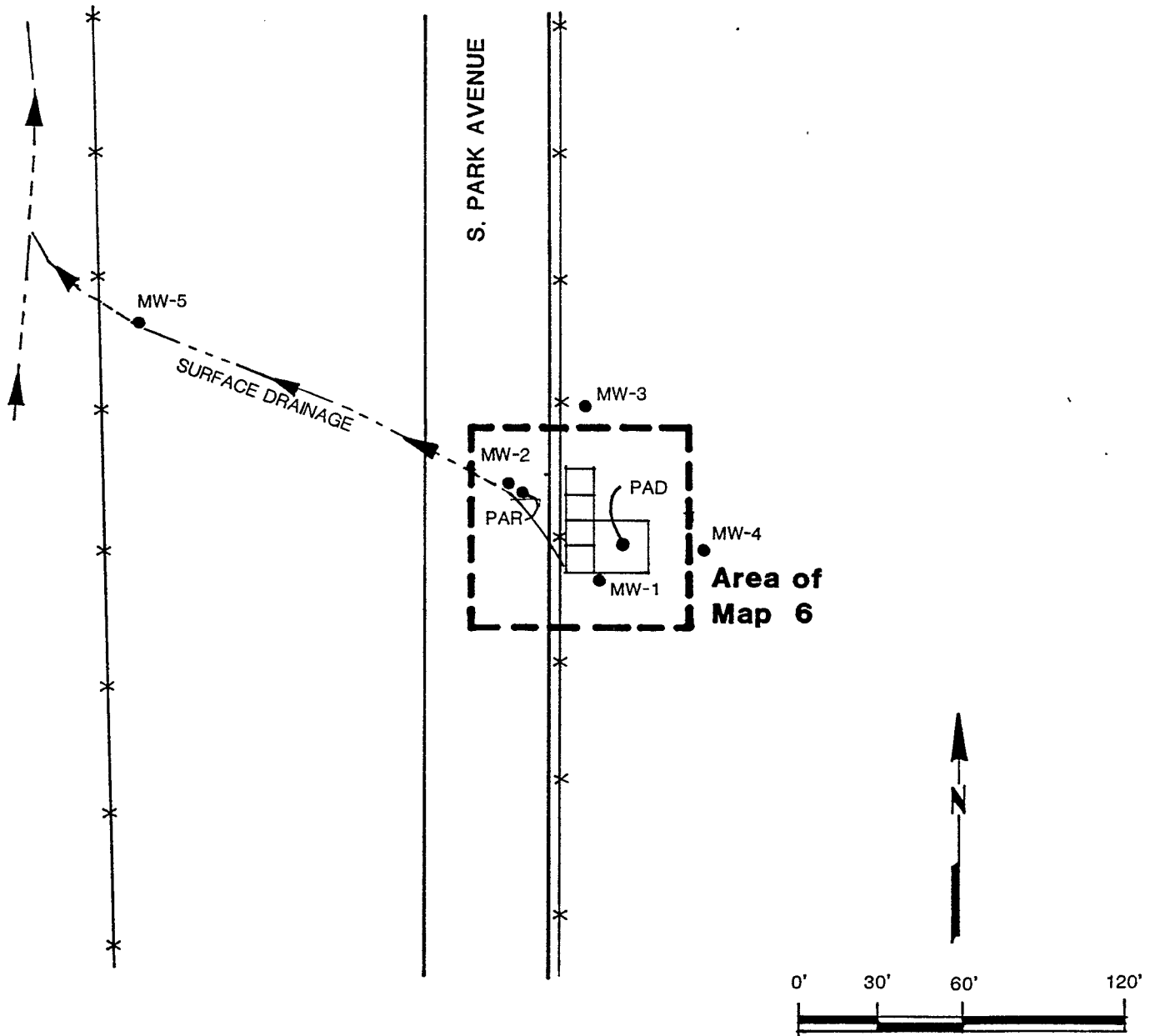
Respondents are advised pursuant to Section 106(b) of CERCLA, 42 U.S.C. Section 9606(b), that willful violation or subsequent failure or refusal to comply with the Orders, or any portion thereof, may subject the Respondents to a civil penalty of no more than \$25,000 per day for each day in which such violation occurs, or such failure to comply continues. Failure to comply with the Orders, or any portion thereof, without sufficient cause may also subject the Respondents to liability for punitive damages in an amount three times the amount of any cost incurred by the government as a result of the failure of Respondents to take proper action, pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. Section 9607(c)(3).

IT IS SO ORDERED on this 29<sup>th</sup> day of January, 1991.  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

By:   
Jeff Zelikson, Director  
Hazardous Waste Management Division  
United States Environmental  
Protection Agency Region IX



DANIEL B. STEPHENS & ASSOCIATES, INC.



**MAP 5**

**SITE**



Table 1. Summary of Chemistry Data

COMPONENT	PAD-1-5	PARK AVENUE	
	Soil 5f (ug/kg)	Soil 90f (ug/kg)	Aqueous 90f (ug/l)
<u>Volatiles</u>			
Methylene Chloride	4,800,000	10	280
Chloroform	290,000	10	270
TCE	2,900,000	18	680
Phenol	690,000		
Benzene	ND (250,000)	4	110
1, 2-Dichloroethane	ND (250,000)	7	100
1, 2-Dichloropropane	ND (250,000)	4	100
Toluene	ND (250,000)	100	ND (1)
1, 1-Dichloroethane	ND (250,000)	ND (3)	4
1, 2-Dichloroethene (total)	ND (250,000)	ND (3)	18
<u>Semi-Volatiles</u>			
1, 4-Dichlorobenzene	2,100,000		ND (10)
1, 2-Dichlorobenzene	12,000,00		12;13
2-Methylphenol	2,100,000		ND (10)
4-Methylphenol	2,600,000		ND (10)
2, 4-Dimethylphenol	5,800,000		ND (10)
Hydrocarbons C10			40
Hydrocarbon C12			60
Oxygenated Hydrocarbons C7			200
Camphor			20

Note: See Maps 5 and 6 for sample locations. Park Avenue boring is indicated by PAR on Maps.  
ND - Not detected (detection limit is given in parentheses)



## TUCSON AIRPORT SOILS

### INDEX TO ADMINISTRATIVE RECORD

1. Documents contained in the Administrative Record for the Tucson International Airport Area Record of Decision for Groundwater Remediation North of Los Reales Road (located at Arizona Department of Water Resources, 310 South Meyer, Tucson).
2. Letter dated June 11, 1990, from Cynthia Kuhn of Snell & Wilmer to Kathleen Johnson of U.S. EPA regarding compliance with CERCLA Section 103(c) reporting requirements.
3. Letter dated August 30, 1990 from Lowell Carty of the Arizona Department of Environmental Quality to Jeffrie Minier of Daniel B. Stephens & Associates providing comments on the July 20, 1990 "Draft Sampling and Analysis Plan for Below-Grade Concrete Structure South of Tucson Airport Hangars."
4. Letter dated September 27, 1990, from Jeffrie Minier of Daniel B. Stephens & Associates to Dennis Pontius of the Arizona Department of Environmental Quality regarding ADEQ's comments on the July 20, 1990 "Draft Sampling and Analysis Plan for Below-Grade Concrete Structure South of Tucson Airport Hangars."
5. Letter dated October 3, 1990 from Daniel Opalski of U.S. EPA to Jeffrie Minier of Daniel B. Stephens & Associates providing comments on the July 20, 1990 "Draft Sampling and Analysis Plan for Below-Grade Concrete Structure South of Tucson Airport Hangars."
6. Letter dated November 16, 1990, from C. Hugh Thompson of Weston to Dan Opalski of U.S. EPA forwarding attached "Investigative Work Plan, Underground Structure South of 3 Hangars, Tucson International Airport, Tucson, Arizona."
7. Guidance dated January 1, 1983 entitled "Emergency Response Procedures for Control of Hazardous Substance Releases," EPA-600/D-84-023 (located only at Superfund Records Center, U.S. EPA, 75 Hawthorne Street, San Francisco, CA [hereafter, Records Center]).
8. Guidance dated April 13, 1987 entitled "Environmental Review Requirements for Removal Actions," OSWER #9360.0-19 (located at Records Center only).
9. Guidance dated February 1, 1988 entitled "Superfund Removal Procedures, Revision #3," OSWER #9360.0-038 (located at Records Center only).

10. Guidance dated April 21, 1987 entitled "The Role of Expedited Response Actions Under SARA," OSWER #9360.0-038 (located at Records Center only).
11. Guidance dated October 1, 1988 entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," OSWER #9355.3-01 (located at Records Center only).

SUPPLEMENT - JANUARY 25, 1991

12. Letter dated December 26, 1990 from Snell & Wilmer, Law Offices, to Charles McKinley, U.S. EPA, on behalf of Tucson Airport Authority confirming its intent to comply with Administrative Order No. 91-5, and requesting that said Order be amended.
13. Report dated January 9, 1991 entitled "Investigative Work Plan, Underground Structure South of 3 Hangars, Tucson International Airport Area, Tucson, Arizona," prepared by Roy F. Weston, Inc. for the Tucson Airport Authority.